Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Inquiry Concerning 911 Access, Routing, and Location in Enterprise Communications Systems	)	PS Docket 17-239

COMMENTS OF
THE AD HOC TELECOMMUNICATIONS USERS COMMITTEE

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SUMMARY

The Ad Hoc Telecommunications Users Committee supports the Commission's twenty year history of deliberate consideration and data driven analysis of issues related to 911 access for Enterprise Communications Systems ("ECS"). The Commission's historic reluctance to regulate operators of ECS and promulgate detailed workplace safety regulations outside its area of subject matter expertise has enabled operators of ECS to identify and customize the best solutions for their particular workplaces, employees, and industries. We urge the Commission not to interfere with the wide discretion currently enjoyed by companies to develop solutions that best meet the safety of their employees. It is the most prudent and legally supportable approach.

Should the Commission abruptly change course on its approach, it should be mindful of its limited statutory authority to regulate operators of ECS and to promulgate workplace safety regulations. The Commission's jurisdiction and regulatory authority is limited by its statutory mandate. Put simply, the Commission does not have authority to regulate ECS operators nor does it have subject matter expertise in workplace safety issues to adopt specific 911 transmission requirements for enterprise systems. In the context of 911 issues for ECS, the Commission has properly deferred to other lawmaking bodies whose jurisdiction is not in question and which are in a better position to understand whether to adopt rules for ECS 911 and, if so, what they should be.

Certain business arrangements between ECS operators and, for example, IP-enabled service providers, create problematic transfers of liability to ECS operators. We urge the Commission to revisit some of its rules relating to 911 for Interconnected VoIP and to make modest revisions that acknowledge key differences between the 911

issues when VoIP is provided as a consumer product and when it is offered as an enterprise product.

Ad Hoc also supports the Commission's thorough inquiry and request for information about the costs of 911 regulation relative to the public safety benefits likely to be realized. We encourage the Commission to scrutinize data provided in response to those questions very carefully. If inadequate data is provided, we encourage the Commission to develop its own. The costs associated with potential regulation are far too great to forego a meaningful cost/benefit analysis.

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The Ad Hoc Telecommunications Users Committee ("Ad Hoc") submits these comments in response to the Commission's Notice of Inquiry[1] in the aforementioned proceeding.

INTRODUCTION

Ad Hoc is a longstanding organization of corporate enterprise customers that individually and collectively purchase large quantities of wireline and wireless telecommunications and information services. Its membership includes companies from a wide variety of industries including manufacturing, financial services, shipping and logistics, and transportation. Ad Hoc's membership does not include any telecommunications carriers or manufacturers of telecommunications equipment.

Most relevant to this NOI, Ad Hoc member companies deploy a wide variety of sophisticated technologies to facilitate their business activities including extensive use

[1] *Inquiry Concerning 911 Access, Routing, and Location in Enterprise Communications Systems*, PS Docket 17-239, Notice of Inquiry, FCC No. 17-125 (rel. Sept. 26, 2017) ("NOI").

of both legacy and IP-based Enterprise Communications Systems ("ECS"). As operators of ECS and adopters of emerging technologies, Ad Hoc members understand the unique challenges presented by both legacy and IP-based ECS in accessing external emergency services provided at the local level. Because of the significant attention and resources their companies dedicate to workplace safety issues, Ad Hoc members also understand how best to integrate ECS into their unique network topologies and corporate geographies.

To that end, Ad Hoc has participated in nearly two decades' worth of Commission proceedings dealing with ECS and access to emergency services.[2] And as we have in every aspect of prior ECS 911 proceedings, we encourage the Commission: (i) to recognize that individual operators of ECS are best positioned to adopt the most effective solutions to enhance workplace safety for their companies in their particular localities; (ii) to acknowledge the Commission's limited jurisdiction over both workplace safety issues and owners/operators of ECS; and (iii) to understand the effects of imposing "one size fits all" regulations which complicate and, sometimes, undermine ECS operators' ability to adopt effective workplace safety solutions for their companies and to manage their telecommunications networks efficiently.

[2] *See* Comments of the Ad Hoc Telecommunications Users Committee on the FNPRM, CC Docket 94-102, IB Docket 99-67 (filed Feb. 19, 2003) ("Ad Hoc FNPRM Comments"); Reply Comments of the Ad Hoc Telecommunications Users Committee on the FNPRM, CC Docket 94-102, IB Docket 99-67 (filed Mar. 25, 2003) ("Ad Hoc FNPRM Reply Comments"); Comments of the Ad Hoc Telecommunications Users Committee on the Second FNPRM, CC Docket 94-102, IB Docket 99-67 (filed Mar. 29, 2004) ("Ad Hoc Second FNPRM Comments"); Reply Comments of the Ad Hoc Telecommunications Users Committee on the Second FNPRM, CC Docket 94-102, IB Docket 99-67 (filed Apr. 26, 2004) ("Ad Hoc Second FNPRM Reply Comments"); and Reply Comments of the Ad Hoc Telecommunications Users Committee on the Public Notice, CC Docket 94-102 (filed Mar. 29, 2005) ("Ad Hoc 2004 Public Notice Reply Comments").

I. THE COMMISSION SHOULD NOT INTERFERE WITH ECS OPERATORS' DISCRETION TO IMPLEMENT THE MOST EFFECTIVE SAFETY POLICIES FOR THEIR COMPANIES' WORKFORCES.

As the Commission considers what role, if any, it should play in the development and/or promulgation of policies, regulations, or best practices for ECS and 911,[3] it should maintain the primacy of ECS owners and operators in making individualized decisions about how best to deploy workplace safety solutions within their own companies. The physical layout of corporate facilities, makeup of workforces and deployment of network technologies and communications devices varies greatly across industries and enterprises. Rather than attempt to prescribe "one-size fits all," top-down mandates for how best to deploy ECS, the Commission should encourage companies to develop individualized solutions that take into account their on-site and local emergency response capabilities.

A. ECS IS ONLY ONE PART OF A RAPIDLY EVOLVING TELECOMMUNICATIONS ECOSYSTEM.

As the Commission correctly describes in the NOI, enterprise based communications systems are changing rapidly as technology shifts from traditional MLTS or Legacy ECS systems to IP-based ECS.[4] Indeed, many large corporations have implemented or have plans to implement enterprise grade, interconnected VoIP for transmission of voice calls over their national and international wide area networks ("WANs"). Nearly all relatively modern ECS are capable of interfacing directly with these backbone transmission technologies and are fully capable of accessing 911 and transmitting call-back and location information.

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3 NOI at ¶ 42.

4 *Id.* at ¶¶ 4-5.

But today most modern corporate networks integrate a variety of different technologies and devices to interconnect corporate locations and to enable collaboration of employees around the globe—by voice, video, and instant messaging. A corporate voice network is now significantly more complex than an inventory of fixed desk-phones that connect to an on-site PBX before accessing the PSTN. Instead, a typical corporate environment involves a highly mobile workforce and highly mobile technology often comprised of a combination of wireless phones, tablets, and softphones on desktops and laptops. Many of these devices, wireless phones in particular, access cellular networks completely independent of on-site ECS. Such devices also have different ways of accessing 911 and transmitting location and call-back data to local Public Safety Answering Points ("PSAPs")); wireless carriers, not the subscribers or the owners of adjacent ECS, are responsible for ensuring access to 911 and transmission of location and call-back information. Given the widespread proliferation and ubiquity of wireless devices among consumers[5] and, in many cases, elevation by consumers of such devices to be their *primary* method of communication, enterprises often wisely integrate wireless calling as part of their workplace safety and emergency communications plans in addition to or in lieu of using ECS.

B. DIFFERENT WORKPLACES HAVE DIFFERENT WORKPLACE SAFETY REQUIREMENTS.

As the Commission does not maintain expertise in workplace safety issues or regulations, the variation of industries and workplaces that use ECS further complicates

[5] Industry estimates for 2016 identify over 395 million mobile subscriber connections in the United States. *See* CTIA, Annual Wireless Industry Survey (2016 Data), https://www.ctia.org/industry-data/ctia-annual-wireless-industry-survey (last visited November 13, 2017).

any attempts to develop a single standard for access to emergency services and transmission of specific location data. Ad Hoc member companies use the full spectrum of potential workplaces: from densely populated floors located in urban high-rise office buildings to multi-building suburban office park campuses to vast manufacturing facilities located in less populated areas. Each type of workplace, and every possible variation of each type of workplace, may require a different plan for employee access to emergency services and, in turn, for delivering emergency services to any employee seeking assistance.

Many workplaces already have extensive on-site security personnel which serve as both a primary responder to on-site emergencies and gatekeeper/escort to arriving emergency service response teams. Specialized facilities may have on-site medical and fire assistance trained to deal with the types of emergencies and hazardous situations that may arise in a particular working environment. And some workplaces even operate their own private emergency answering point ("PEAP") which is often designed to pre-position first responders on-site to address emergency situations quickly and with in-depth knowledge of the particular facility at which the emergency occurs.

The Commission should acknowledge the limits of its ability to fashion uniform workplace safety standards for different types businesses engaged in different types of activities using different types of workplaces all of which deploy ECS differently. Instead, the Commission should focus on encouraging owners/operators of ECS to implement safety measures that are most likely to serve their particular employee populations best, consistent with state and local laws and regulations already in place.

By allowing owners/operators of ECS to develop customized emergency response solutions for their ECS, public safety will be enhanced more effectively than generic solutions applied across all types of companies and workplaces.

C. MANY STATES THAT HAVE ADOPTED E911 MLTS LAWS ALREADY PERMIT ECS OWNERS/OPERATORS TO IMPLEMENT CUSTOMIZED SOLUTIONS.

The Commission notes that it previously "concluded that state and local governments were better positioned to devise rules to ensure effective E911 deployment of multi-line telephone systems in their jurisdictions."[6] Since that decision nearly fifteen years ago, additional states have, indeed, adopted E911 rules for MLTS[7] owners/operators.

Importantly, many of the state laws mandating that owners/operators of MLTS connect 911 calls to the local PSAP and transmit specific location and call-back information acknowledge the importance of allowing MLTS operators to customize solutions that fit their workplaces by providing a useful exemption to the specific statutory requirements otherwise applicable owners/operators of MLTS. The exemption generally permits MLTS owner/operators to substitute "adequate and alternative" methods for directing calls to emergency response services, including redirection of such calls to on-site PEAPs or security desks, as well as changing the specific location

[6] NOI at ¶ 36.

[7] Although the Commission has adopted the term ECS as a more descriptive name for what were previously called multi-line telephone systems ("MLTS"), state laws currently addressing the subject matter do not use the ECS terminology. Therefore, in cases where we refer to the requirements of various state laws, we revert to the traditional term, MLTS, used in those state statutes and regulations. For purposes of these comments, there is no distinction intended between the two terms.

and call back information that must be transmitted with a 911 call.[8] This accommodation does not excuse MLTS owner/operators from providing access to emergency services; it simply provides additional flexibility to owners/operators of MLTS in those states to customize their emergency calling plans and procedures for many of the reasons described above. The Commission should not disrupt this statutory exception by adopting different overarching national rules unless it too provides operators of ECS a similar exemption.

II. THE COMMISSION DOES NOT HAVE ADEQUATE JURISDICTION OR EXPERTISE TO IMPOSE WORKPLACE SAFETY REGULATIONS ON ECS OWNERS/OPERATORS IN THE FORM OF DIRECT ECS REGULATIONS

Prior to considering any proposed regulations that would impose obligations on ECS owners/operators, the Commission must first answer the threshold question of whether it has jurisdiction to regulate businesses that are not providers of Title II services or licensees of Title III services. As the Commission notes, it has previously declined to address the question of whether it has jurisdiction over ECS operators.[9] Now, the Commission asks whether specific statutory provisions grant the Commission authority to adopt rules that would apply to enterprise owners and ECS operators.[10]

Ad Hoc has advised the Commission in multiple pleadings that have been filed in nearly every relevant proceeding addressing 911 requirements for ECS over the last 20 years that the Commission does not have adequate legal authority to regulate operators

[8] *See, e.g.,* Conn. Gen. Stat. § 28-25b(e) (2017) (Connecticut); 65-625-011 Me. Code R § 10 (2017) (Maine); Mich. Admin. Code r. 484.904 (2017) (Michigan); Minn. Stat. § 403.15, Subd. 5(a)(2) (2017) (Minnesota); and 35 Pa. Cons. Stat. § 5311.16(a)(2) (2017) (Pennsylvania).

[9] NOI at ¶ 36.

[10] *Id.* at ¶ 43.

of ECS.[11] We need not repeat the arguments in detail here, however, complicated legal analysis is not required to arrive at the conclusion that the Commission has no statutory authority to regulate owners of ECS, and it has no subject matter expertise in designing workplace safety regulations. Furthermore, while several commenters raised similar objections and made similar supporting arguments regarding the Commission's lack of jurisdiction in these earlier proceedings,[12] no party managed to make even a colorable case the Commission's jurisdiction permitted regulation of ECS operators or adoption of workplace safety rules.[13]

Since the Commission last considered the issue of whether its statutory authority extended to regulation of businesses not otherwise subject to Title II or Title III, there has been no material change in the Commission's statutory authority. Congress has not provided the Commission any additional statutory authority to regulate ECS owners or adopt rules governing workplace safety. Indeed, recently passed bills adopting Kari's Law indicates that Congress does not want to invest in the Commission expansive new authority to regulate ECS operators. Both the House and the Senate bills currently awaiting reconciliation narrowly focus on the issue of requiring that telephone systems permit access to 911 without the dialing of a prefix.[14] Neither provides additional authority to the Commission to adopt additional ECS related regulations. And, while the House bill imposes obligations on those "engaged in the business of installing,

[11] *See* Ad Hoc FNPRM Comments at 4-9; Ad Hoc FNPRM Reply Comments at 2-9; Ad Hoc Second FNPRM Comments, at 2-15; Ad Hoc Second FNPRM Reply Comments, at 2-16; Ad Hoc 2004 Public Notice Reply Comments at 2-4.

[12] Ad Hoc FNPRM Reply Comments at 3 & n.3.

[13] *Id.* at 6-8.

[14] Kari's Law Act of 2017, H.R. 582, 115th Cong. (2017); Kari's Law Act of 2017, S.123, 115th Cong. (2017).

managing or *operating* MLTS,"[15] the Senate bill conspicuously does not include obligations applicable to those that *operate* MLTS.[16] We do not yet know what the final text of the bill will contain nor what the scope of Kari's Law will ultimately be; however it is clear that there is not vast Congressional support for the regulation of ECS operators.

The absence of such statutory authority to lawfully impose regulations on ECS operators, the lack of subject matter expertise on workplace safety issues necessary to develop such regulations, and the failure of Congress to expand the Commission's authority in this area (despite repeated opportunities in multiple pieces of relevant legislation to do so) should give the Commission pause when considering (or, in this case, reconsidering) the scope of its authority to develop rules for ECS.

In contrast, the Commission *has* previously acknowledged that states have unambiguous jurisdiction over ECS operators[17] and that they "are in a better position to devise rules to ensure that E911 is effectively deployed over MLTS in their jurisdictions."[18] In many cases, states have acted, adopting rules that are the product of their legislative processes and reflect the reasoned judgment of their elected officials about how best to deploy E911 in their jurisdiction.[19] Those states that have elected not to prioritize adoption of E911 legislation have elected not to prioritize adoption of MLTS rules in their

[15] H.R. 582 at § 2(a) (adding Section 721(b)) (emphasis added).

[16] S. 123 at § 2(a) (adding Section 721(b) and (c)).

[17] *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems,* Report and Order and Second Further Notice of Proposed Rulemaking, 18 FCC Rcd 25340 at 75, ¶ 54 (2003) ("E911 Scope Order") ("There appears to be little question that states have jurisdiction over operators of MLTS and could use their police powers to place requirements upon them.")

[18] E911 Scope Order at 69, ¶ 50 & n.178.

[19] NOI, Appendix B.

jurisdiction—also a choice of legislative priorities that deserves Commission deference.

Despite statements that state legislatures are best positioned to adopt rules for their states, the Commission has expressed a willingness to act in cases where states fail to do so[20] and an interest in filling gaps where, in the Commission's opinion, states failed to effectively implement E911 for ECS.[21] Ad Hoc cautions the Commission against such second-guessing or attempts to fill or correct perceived gaps in rules that have been drafted and produced by legitimate state legislative processes. While a wide variety of state rules can be inconvenient for enterprises that operate ECS in multiple states and while the rules adopted may not satisfy the Commission's expectations for appropriate safety regulations that it might have chosen to adopt if it had the legal authority to do so, this variation in rules is an inevitable product of our federal system and the Commission's decision to acknowledge that states had clear authority and better expertise to adopt rules (or not to adopt rules) for MLTS necessarily means that the Commission cannot now determine the choices made were incorrect or insufficient.. Furthermore, a well-intentioned desire to improve upon state legislation with even stricter regulations is not a substitute for actual statutory jurisdiction to do so.

Ad Hoc's members, who typically operate national and global networks, do find compliance with multiple state requirements inefficient, burdensome, and time consuming. They would generally prefer standardizing their practices around a single national standard for 911. But standardizing around a national standard would only be practicable if such standard: (i) imposed *reasonable and achievable* obligations on ECS

[20] E911 Scope Order at 74-5, ¶ 54.

[21] NOI at ¶ 42.

operators that passed reasonable cost/benefit analyses; (ii) provided accommodation/exemption for adequate and alternative methods for delivery access to emergency services in the workplace, *supra,* in Section I; (iii) included limitations on liability resulting from 911 failures in cases where the ECS operator exercised reasonable efforts to comply with the requirements;[22] and (iv) preempted inconsistent state laws imposing similar obligations on similar subject matter. While a single national standard satisfying these specific requirements is appealing to Ad Hoc's member companies, until such time that Congress provides clear statutory authority to adopt ECS regulations, Ad Hoc does not believe the Commission can lawfully impose national 911 regulations on ECS owners/operators.

III. ECS OPERATORS MUST ENTER INTO BUSINESS ARRANGEMENTS THAT REQUIRE THEM TO ASSUME DISPROPORTIONATE LIABILITY FOR 911 ISSUES

The Commission seeks comment on the "typical commercial arrangements for provision of ECS" and information on whether "specific business or contractual relationships … make it harder or easier for ECS to provide E911 service".[23] For enterprise customers using ECS with enterprise grade Interconnected VoIP, the typical commercial arrangement with providers of Interconnected VoIP requires the ECS operator to assume: (i) disproportionate liability and responsibility for 911 issues; and (ii) obligations that are more appropriate for non-business, consumer use of Interconnected VoIP service.

[22] Such limitations apply in several state laws, including: Minnesota (Minn. Stat. § 403.07, Subd. 5) (2017); Vermont (Vt. Stat. Ann. tit. 30, § 7060 (2017), and Virginia (Va. Code Ann. §§ 56-484. 24) (2017)

[23] NOI at ¶ 29.

When the Commission first adopted 911 rules for providers of Interconnected VoIP it largely had in mind provision of Interconnected VoIP to *consumers.* Hence the straightforward but inflexible requirements that Interconnected VoIP providers must obtain from each customer the physical location from which the service will be utilized, a method for updating "Registered Location" information, and, lastly, the provision of a "warning label" describing the circumstances under which Interconnected VoIP may not function accurately.[24]

A typical agreement for Interconnected VoIP services between a provider of Interconnected VoIP and an enterprise customer requires the customer of record—in this case, the operator of the ECS—to assume all the responsibilities of an Interconnected VoIP services provider with respect to its employee/end-users. So instead of a consumer placing a single warning label on a single phone, or establishing a single registered location for its single-user account, or receiving a single notice of 911/VoIP limitations in its welcome package, an ECS operator is expected to distribute warning labels to its (thousands or tens of thousands of) employees, establish registered locations for all of its (thousands or tens of thousands of) employees, ensure its (thousands or tens of thousands of) employees receive notice requirements regarding 911 service limitations. In addition, it must monitor all its employees' use of the VoIP service to ensure that they are not using the service nomadically without updating their individual registered location.

The providers' agreements also disclaim any responsibility for failures associated

[24] 47 C.F.R. §9.5(d)-(e).

with 911 service and expressly rely on “provider parity” protections which extend the same immunity or other protection from liability enjoyed by LECs in that jurisdiction for failures in delivering 911 services.[25]

In practice, this arrangement becomes nearly unworkable. ECS operators are effectively required to assume the responsibilities of an Interconnected VoIP provider with respect to their employee end-users. Yet they do not enjoy the immunity from liability that IP-enabled voice service providers enjoy. Distribution of warning labels to thousands of employee end users is neither practical nor an effective method for conveying warnings about the limitations of 911. ECS operators do not have adequate visibility into end users’ use of the Interconnected VoIP service to determine whether end users have updated their Registered Location information. And, regardless, IP enabled voice service providers rarely, if ever, contractually commit to dynamically update Registered Location information of end-users, or to do so in a timeframe that makes practical sense for nomadic use of the service.

To complicate matters further, ECS operators must often resort to deployment of third party software solutions that enhance transmission of accurate location information of their (typically) nomadic end-users. These third party software vendors also insist on inclusion of contractual provisions that label them “emergency communications providers” which also enjoy “provider parity” for purposes of gaining immunity from any damages caused by failures of the 911 service.[26] The ECS operator is left with the responsibility for ensuring uninterrupted access to 911 with transmission of accurate

[25] 47 U.S.C. §615a(a) (2017).

[26] *Id.*

location information, little to no control over the transmission of accurate information, and no immunity from liability enjoyed by other providers in the transmission channel of 911 calls.

The Commission should consider modifications to its Interconnected VoIP rules to enhance the practicality and ability of operators of ECS to effectively manage its end-users' access to 911 and transmission of accurate location data. Specifically, the Commission should consider including provisions in 47 C.F.R. 9.5 that permit carriers to discharge their "notification/warning label" obligations differently for enterprise customers, instead permitting the enterprise customer of record full discretion in determining the best method and form for notifying employees of VoIP/911 limitations. The Commission should also impose on IP enabled service providers the obligations to dynamically update location information of nomadic end users shortly after entry of new location information so that when nomadic VoIP users have access to 911, the correct location information is transmitted along with any call to emergency services.

IV. THE COMMISSION SHOULD SCRUTINIZE RECORD INFORMATION ABOUT THE COST AND BENEFITS OF SUPPORTING 911

Ad Hoc strongly supports the Commission's request for specific information about the costs imposed and benefits realized from the imposition of additional 911 mandates and regulations on ECS.[27] The record in this proceeding (and its MLTS predecessors) does not contain adequate information about the actual costs that the imposition of additional ECS requirements would impose upon the

[27] NOI at ¶ 32.

owners/operators of ECS, and, ultimately, on the economy as a whole.

Thus, we urge the Commission to scrutinize all data it receives in response to its inquiry. If no data is provided, the Commission should establish as a priority in this proceeding the independent collection or development of such data. The Commission should then conduct an appropriate analysis to determine whether the imposition of such costs would confer a commensurate benefit of increased access to E911 and overall enhancement of public safety.

A significant component of this cost/benefit analysis should include an assessment of the actual current capabilities of PSAPs and emergency response agencies (i.e., police, fire, rescue) in numerous local jurisdictions that would receive calls requesting emergency assistance. If a significant number of PSAPs are still not able to receive and process the stream of data proposed for transmission with 911 calls originating from ECS, or there are reasons unrelated to E911 why police, fire, and rescue personnel cannot react to emergency calls in a timely fashion—for example, due to a lack of personnel or equipment—any standard imposing such a requirement that equipment be capable of transmitting such information would not be justified.

CONCLUSION

The Commission should not abandon its long-standing approach to 911 issues for ECS. It has long recognized that entities better placed to understand the issue and develop workable solutions should be permitted to act, or not, within their discretion. The Commission's jurisdiction in this area is limited, and we continue to urge the Commission to be mindful of those limits. If the Commission dramatically

changes course, and seeks to regulate operators of ECS and adopt workplace safety regulations, we urge the Commission to proceed with a very thorough cost benefit analysis of the regulations it proposes to adopt.

Respectfully submitted,

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